

dark central line. Under wing-coverts white, showing as a conspicuous mark when the bird is on the wing, as in *Procellaria cooki*, to which, and to *P. mollis*, it is closely allied. Bill black; tarsi fleshy black; toes and webs, except basal portion of the latter, which are flesh-coloured, black. Total length $4\frac{1}{4}$ inches*; extent of wings 28; wing $8\frac{1}{2}$; tail $4\frac{1}{4}$; bill from rictus $1\frac{3}{10}$, and from base 1; tarsus 1; middle toe and claw $1\frac{4}{10}$. There is no outward sexual distinction."

XXXVI.—*Remarks on Macgregor's Paradise-bird*, *Cnemophilus macgregori*. By P. L. SCLATER, M.A., Ph.D., F.R.S.

(Plate X.)

MR. C. W. DE VIS, of the Queensland Museum, Brisbane, has most kindly forwarded to me for examination the typical and unique example of the new Paradise-bird, *Cnemophilus macgregori*, discovered by Sir William Macgregor's expedition during the ascent of the Owen-Stanley Mountains, and described by Mr. De Vis in the report on Sir W. Macgregor's birds, which has been reprinted in the January number of this Journal (see above, p. 25). I have had the pleasure of showing this beautiful specimen to Count T. Salvadori, Dr. Bowdler Sharpe, and other experienced ornithologists, who all agree with Mr. De Vis that it is a new and very distinct form, and well worthy of generic separation from other known birds. I also exhibited the specimen at the Meeting of the Zoological Society on the 3rd of March last†, where it attracted general admiration.

I have now the pleasure of giving the first figure of this brilliant bird (Plate X.) and of offering a few remarks on its structure and affinities.

Mr. A. P. Goodwin, who first mentioned and shortly described the present species, called it a Paradise-bird, and

* Doubtless a misprint. The Welsh specimen, which is mounted, measures, roughly, from the tip of the bill to the tip of the tail 12 inches.

† See P. Z. S. 1891, p. 179.

named it *Xanthomelus macgregori* (Ibis, 1890, p. 153), believing it to be most nearly allied to *Xanthomelus aureus*. Mr. De Vis (*l. s. c.*) calls the species a "very distinct kind of Bower-bird," and states his opinion that its proper systematic position is between *Amblyornis* and *Xanthomelus*. I will therefore compare it with the latter form, of which a fine example belonging to the Leyden Museum has been kindly lent to me by Dr. Jentink.

There is certainly a general resemblance in colour and shape between *Cnemophilus* and *Xanthomelus*, and the feet in both forms are large and strong, although this feature is carried to a much greater extent in *Xanthomelus*, which has the tarsi much stronger and rather longer than *Cnemophilus*. In *Xanthomelus*, moreover, the scutellations of the front of the tarsus are well marked, whereas in *Cnemophilus* the scutella are fused into one nearly uniform plate. The wings of *Cnemophilus* are much shorter and more rounded than those of *Xanthomelus*. But it is in the bill of these two forms that the greatest divergence is observable.

In *Xanthomelus* the bill is long and strong, the loreal plumes are short, and the base of the bill, nostrils, and culmenal ridge are quite bare. In *Cnemophilus* the bill is shorter and not so thick, the loreal plumes are elongated, projecting forwards, and covering the base of the bill so far as to partially cover the nostrils. Besides this the frontal plumes are elongated and elevated into a compressed ridge, which is carried forward over the culmen and backward to the base of the very singular thin crest, composed of five or six lengthened feathers, which springs up immediately behind the front.

In these last characters *Cnemophilus* is quite distinct from other birds, but obviously approaches *Diphyllodes*. I should be disposed, therefore, to place *Cnemophilus* along with the Paradise-birds rather than along with the Bower-birds, if these two groups are to be kept apart. But there can be no doubt that the Bower-birds are closely allied to the Paradise-birds, and several well-known recent authorities have united them into one family.



J. G. Keulemans del. et lith.

Mintern Bros. imp.

CNEMOPHILUS MACGREGORII